#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

(707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013246 Address: 333 Burma Road **Date Inspected:** 23-Mar-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Zhao Chen Sun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Tower Trial Assembly

#### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

#### TOWER TRIAL ASSEMBLY:

This QA Inspector performed Randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-6028 (MT) report for this date. The member is identified as South Tower Lift 1 skin A, D and E, Bearing plate. The weld designations reviewed are as follows.

SSD1- SA15 D/F-1, 3, 5. SSD1-SA 40B/E-5, 6, 13, 18, 21 SSD1-SA 16F/G-11, 12, 16, 20, 24

NDT Notification No-005406

This QA Inspector observed the following work in progress:

## EAST TOWER LIFT 1

This QA Inspector observed ZPMC qualified welding personnel identified as 066482. Perform Flux Core Arc Welding (FCAW) on East Tower lift 1 skin D outside, bearing plate. Joint identified as ESD1-SA296-B/E-24. ZPMC CWI Identified as Yu Yong Jun, The welding parameters as measured using QC's calibrated instrument

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 040723, 046713, 059525, Perform Flux Core Arc Welding (FCAW) on East Tower lift 1 skin C outside, bearing plate. Joint identified as ESD1-SA294-F/G-31, 54, 64. ZPMC CWI Identified as Yu Yong Jun, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 067947, 049541 Perform Flux Core Arc Welding (FCAW) on East Tower lift 1 skin E outside, bearing plate. Joint identified as ESD1-SA227-F/H-36, 48. ZPMC CWI Identified as Yu Yong Jun, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F. For more information see below attached photo.

### WEST TOWER LIFT 1

This QA Inspector observed ZPMC qualified welding personnel identified as 069469, 054459, Perform Flux Core Arc Welding (FCAW) on West Tower lift 1 skin D outside, bearing plate. Joint identified as WSD1-SA295-B/E-17, 24, 34, ZPMC QC Identified as Liu Zhi, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 067661, 069712, 066251, Perform Flux Core Arc Welding (FCAW) on West Tower lift 1 skin C outside, bearing plate. Joint identified as WSD1-SA294-F/G-50, 60, 73, ZPMC QC Identified as Liu Zhi, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

#### SOUTH TOWER LIFT 1

This QA Inspector observed ZPMC qualified welding personnel identified as 053116 Perform Flux Core Arc Welding (FCAW) on South Tower lift 1 skin E outside, bearing plate. Joint identified as SSD1-SA16-F/G-36, ZPMC CWI Identified as Yu Yong Jun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F. For more information see below attached photo.

### NORTH TOWER LIFT 1

This QA Inspector observed ZPMC qualified welding personnel identified as 066283, 057266. Perform Flux Core Arc Welding (FCAW) on North Tower lift 1 skin C inside, bearing plate. Joint identified as NSD1-SA17-F/G-25, 33. ZPMC QC Identified as Lu Wei Chao, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 066825, 066683. Perform Flux Core Arc Welding (FCAW) on North Tower lift 1 skin E inside, bearing plate. Joint identified as NSD1-SA76-F/H-3, 21, 13. ZPMC QC Identified as Lu Wei Chao, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





## **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest phone: 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer